

Contract No. 60D91

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length. All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

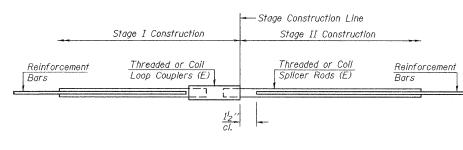
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- Minimum Capacity (Tension in kips) =  $1.25 \times fy \times A_t$
- Minimum \*Pull-out Strength = 0.66 x fy x A<sub>f</sub>

Where fy = Yield strength of lapped reinforcement bars in ksi.

- $A_t$  = Tensile stress area of lapped reinforcement bars. \* = 28 day concrete

	BAR SPLIC	ER ASSEMBLI	ES
		Strengt	h Requirements
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8''	14.7	7.9
#5	2'-2"	23.0	12.3
#6	2'-7''	33.1	17.4
#7	3′-5″	45.1	23.8
#8	4'-6''	58,9	31.3
#9	5′-9′′	75.0	39.6
#10	7′-3′′	95.0	50.3
#11	9'-0''	117.4	61.8



#### STANDARD

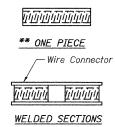
Bar Size	No. Assemblies Required	Location
#6	24	Deck at exp. joins

BAR SPLICER ASSEMBLY DETAILS IL RTE. 137 (BUCKLEY ROAD) OVER DES PLAINES RIVER FAP 352 SECTION 56 B-I-2 LAKE COUNTY SN 049-0063



The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



### BAR SPLICER ASSEMBLY ALTERNATIVES

\*\*Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.

# Washer Face ′′B′′

-Foam Plugs

Threaded or Coil

Splicer Rods (E)

—Stage Construction Line

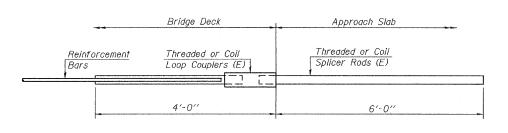
Template

Forms —

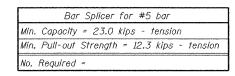
### INSTALLATION AND SETTING METHODS

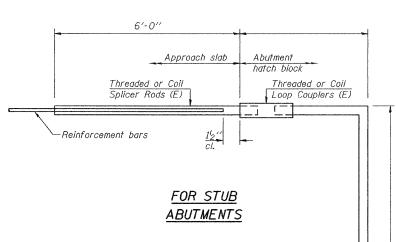
<u>"A"</u>

"A" :Set bar splicer assembly by means of a template bolt. "B" :Set bar splicer assembly by nailing to wood forms or cementing to steel forms. (E): Indicates epoxy coating.



## FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS





Min.	Capacity	= 23.0	kips -	tension	
Min.	Pull-out	Strength	= 12.3	kips -	tension

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